

REV.
F

AS897™

RATIONALE

"INACTIVE" STATUS REPLACED BY "NOT RECOMMENDED." ALTERNATE MATERIAL ADDED TO NOTE 1.b. SPECIFICATION CALLOUTS UPDATED TO CURRENT ISSUE. "INTENDED USE" NOTE REVISED. QML STATEMENT REVISED.

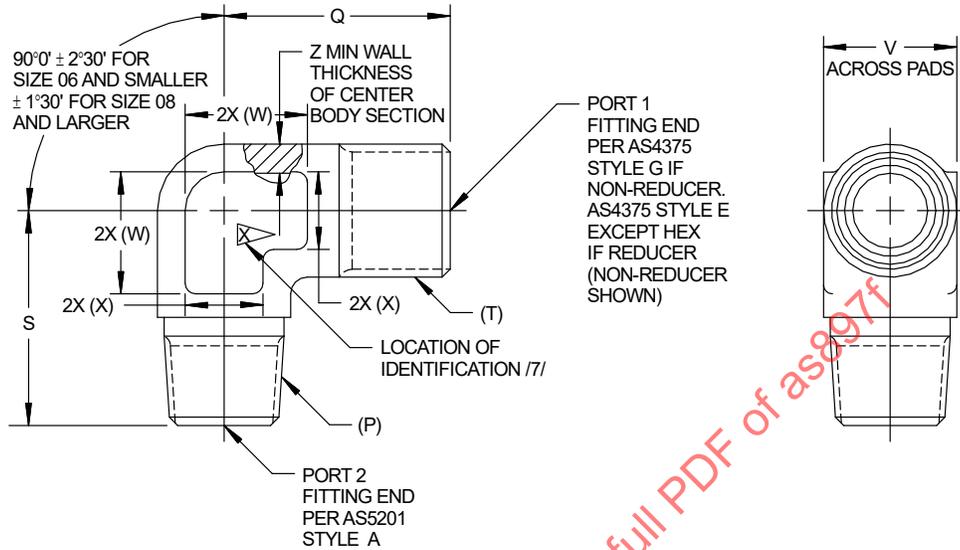
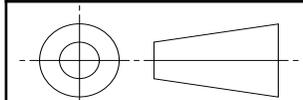


FIGURE 1 - FITTING, ELBOW, 90°, STANDARD AND REDUCER, FLARELESS TUBE TO PIPE, EXTERNAL THREAD

NOT RECOMMENDED IN PART /4/

For more information on this standard, visit
<https://www.sae.org/standards/content/AS897F>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS4842/2 /6/



AEROSPACE STANDARD

FITTING, ELBOW, 90°, STANDARD AND REDUCER,
FLARELESS TUBE TO PIPE,
EXTERNAL THREAD

AS897™
SHEET 1 OF 6

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TABLE 1 - FORGING SIZE /8/

SIZE OF PORT 2	SIZE OF PORT 1 02	SIZE OF PORT 1 03	SIZE OF PORT 1 04	SIZE OF PORT 1 05	SIZE OF PORT 1 06	SIZE OF PORT 1 08	SIZE OF PORT 1 10	SIZE OF PORT 1 12	SIZE OF PORT 1 16	SIZE OF PORT 1 20	SIZE OF PORT 1 24	SIZE OF PORT 1 32
02	03	03	04	05	06	08	10	12	16	20	24	32
04	06	06	06	06	06	08	10	12	16	20	24	32
06	08	08	08	08	08	08	10	12	16	20	24	32
08	10	10	10	10	10	10	10	12	16	20	24	32
12	12	12	12	12	12	12	12	12	16	20	24	32
16	16	16	16	16	16	16	16	16	16	20	24	32
20	20	20	20	20	20	20	20	20	20	20	24	32
24	24	24	24	24	24	24	24	24	24	24	24	32
32	32	32	32	32	32	32	32	32	32	32	32	32

TABLE 2 - DIMENSIONS V - Z

BASIC NO. AS897 /8/ /15/ SIZE CODE	V	W	X	Z
03	.360- .377	.375	.250	.090
04	.423- .440	.500	.250	.110
05	.485- .502	.500	.312	.120
06	.547- .565	.625	.312	.120
08	.735- .753	.625	.438	.150
10	.860- .878	.750	.438	.170
12	1.047-1.065	.875	.500	.185
16	1.292-1.317	1.062	.625	.205
20	1.605-1.630	1.250	.750	.240
24	1.855-1.880	1.438	.875	.250
32	2.542-2.572	2.000	1.188	.350

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TABLE 3 - LEG LENGTH Q

FORGING SIZE	SIZE OF PORT 1 02	SIZE OF PORT 1 03	SIZE OF PORT 1 04	SIZE OF PORT 1 05	SIZE OF PORT 1 06	SIZE OF PORT 1 08	SIZE OF PORT 1 10	SIZE OF PORT 1 12	SIZE OF PORT 1 16	SIZE OF PORT 1 20	SIZE OF PORT 1 24	SIZE OF PORT 1 32
03	.789	.836										
04	.820	.867	.898									
05	.883	.930	.961	.961								
06	.961	1.008	1.039	1.039	1.055							
08	1.806	1.133	1.164	1.164	1.180	1.273						
10	1.180	1.226	1.258	1.258	1.274	1.367	1.430					
12	1.272	1.320	1.351	1.351	1.367	1.460	1.523	1.586				
16	1.429	1.476	1.507	1.507	1.523	1.616	1.679	1.742	1.742			
20	1.585	1.632	1.663	1.663	1.679	1.772	1.835	1.898	1.898	1.898		
24	1.710	1.757	1.788	1.788	1.804	1.897	1.960	2.023	2.023	2.023	2.023	
32	2.148	2.159	2.226	2.226	2.242	2.335	2.398	2.461	2.461	2.461	2.461	2.461

TABLE 4 - LEG LENGTH S ±.031

FORGING SIZE	SIZE OF PORT 2 02	SIZE OF PORT 2 04	SIZE OF PORT 2 06	SIZE OF PORT 2 08	SIZE OF PORT 2 12	SIZE OF PORT 2 16	SIZE OF PORT 2 20	SIZE OF PORT 2 24	SIZE OF PORT 2 32
03	.727								
04	.789								
05	.789								
06	.898	1.085							
08	.993	1.196	1.211						
10	1.087	1.290	1.305	1.477					
12	1.179	1.382	1.397	1.569	1.585				
16	1.368	1.571	1.586	1.758	1.774	1.961			
20	1.758	1.961	1.976	2.148	2.164	2.351	2.383		
24	1.883	2.086	2.101	2.273	2.289	2.476	2.508	2.524	
32	2.337	2.540	2.555	2.727	2.743	2.930	2.962	2.977	3.008

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TABLE 5 - TUBE SIZE AND CORRESPONDING THREAD

PORT SIZE	NOMINAL TUBE SIZE	T THREAD PER AS8879	P THREAD PER AS71051 ANPT
02	.125	.3125-24 UNJF-3A	1/8 -27
03	.188	.3750-24 UNJF-3A	----
04	.250	.4375-20 UNJF-3A	1/4 -18
05	.312	.5000-20 UNJF-3A	----
06	.375	.5625-18 UNJF-3A	3/8 -18
08	.500	.7500-16 UNJF-3A	1/2 -14
10	.625	.8750-14 UNJF-3A	----
12	.750	1.0625-12 UNJ-3A	3/4 -14
16	1.000	1.3125-12 UNJ-3A	1-11 1/2
20	1.250	1.6250-12 UNJ-3A	1 1/4 -11 1/2
24	1.500	1.8750-12 UNJ-3A	1 1/2 -11 1/2
32	2.000	2.5000-12 UNJ-3A	2-11 1/2

NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

1/ MATERIAL:

- a. DASH AS CODE LETTER - TYPE 4130 STEEL FORGING OR BAR PER AMS-S-6758 OR AMS6370.
- b. CODE LETTER D - TYPE 2014-T6 ALUMINUM ALLOY FORGING PER AMS4133 OR AMS-QQ-A-367, OR TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6, OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4339. /4/
- c. CODE LETTER J - TYPE 304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5639.
- d. CODE LETTER K - TYPE 316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5648.
- e. CODE LETTER R - TYPE 321 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5645.
- f. CODE LETTER S - TYPE 347 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5646. /4/
- g. CODE LETTER W - TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS-QQ-A-367 OR AMS4141, OR TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9, OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124.

2. FINISH:

- a. DASH AS CODE LETTER - CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2.
- b. MATERIAL CODE LETTER D - ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2 DYED GREEN SIMILAR TO COLOR 14187 OF AMS-STD-595.
- c. MATERIAL CODE LETTER J - PASSIVATE PER AMS2700, TYPE 6 OR 7.
- d. MATERIAL CODE LETTER K - PASSIVATE PER AMS2700, TYPE 6 OR 7.
- e. MATERIAL CODE LETTER R - PASSIVATE PER AMS2700, TYPE 6 OR 7.

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